

## **Transport Information Document**

Date: April 27, 2019

3M ID Number: 70-0160-5484-6

Product Description: 3M(TM) Tape Primer 94 Clear light yellow, 0.66 mL, 1000 per case Ampule Bulk

Transport Protective Service: PROTECTIVE SERVICE NOT REQUIRED

NMFC Item: 046030 NMFC Sub: 00 NMFC Class: 055.0

Flash Point (Closed-cup): -4°F/-20°C

UNITED STATES DEPARTMENT OF TRANSPORTATION - GROUND (U.S. DOT, 49 CFR)

DANGEROUS GOODS IN EXCEPTED QUANTITIES

UNITED STATES DEPARTMENT OF TRANSPORTATION - VESSEL (U.S. DOT, 49 CFR)

UN1993, FLAMMABLE LIQUID, N.O.S., (CYCLOHEXANE, XYLENE), 3, II, LIMITED QUANTITY, -020C

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA)

UN1993, FLAMMABLE LIQUID, N.O.S., (CYCLOHEXANE, XYLENE), 3, II

INTERNATIONAL MARITIME ORGANIZATION (IMO)

UN1993, FLAMMABLE LIQUID, N.O.S., (CYCLOHEXANE, XYLENE), 3, II, LIMITED QUANTITY, -020C

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## **Safety Data Sheet**

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## **SECTION 1: Identification**

#### 1.1. Product identifier

3M<sup>™</sup> Adhesion Promoter 111

#### **Product Identification Numbers**

70-0064-0398-7, 70-0064-0673-3, 70-0064-0993-5, 70-0067-3513-1, 70-0067-5111-2

#### 1.2. Recommended use and restrictions on use

**Recommended use** Adhesion Promoter.

1.3. Supplier's details	
<b>MANUFACTURER:</b>	3M
DIVISION:	Industrial Adhesives and Tapes Division
ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number 1-800-364-3577 or (651) 737-6501 (24 hours)

### **SECTION 2: Hazard identification**

#### 2.1. Hazard classification

Flammable Liquid: Category 2. Serious Eye Damage/Irritation: Category 2A. Specific Target Organ Toxicity (single exposure): Category 3.

2.2. Label elements Signal word Danger

**Symbols** Flame | Exclamation mark |

#### **Pictograms**



Hazard Statements Highly flammable liquid and vapor.

Causes serious eye irritation. May cause drowsiness or dizziness.

#### **Precautionary Statements**

#### **Prevention:**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use explosion-proof electrical/ventilating/lighting equipment. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wear protective gloves and eye/face protection. Wash thoroughly after handling.

#### **Response:**

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Call a POISON CENTER or doctor/physician if you feel unwell.

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

### Storage:

Keep cool. Keep container tightly closed. Store locked up in a well-ventilated place.

#### **Disposal:**

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

## **SECTION 3: Composition/information on ingredients**

Ingredient	C.A.S. No.	% by Wt
Isopropyl alcohol	67-63-0	90 - 99.5 Trade Secret *
Active Ingredient (NJTS Reg No 04499600- 7161)	Trade Secret*	< 1.0 Trade Secret *

NJTS or NJTSRN: New Jersey Trade Secret Registry Number.

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

## **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### Inhalation:

Remove person to fresh air. If you feel unwell, get medical attention.

#### **Skin Contact:**

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

#### **Eye Contact:**

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

#### If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

#### 4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

## **4.3. Indication of any immediate medical attention and special treatment required**

Not applicable

## **SECTION 5: Fire-fighting measures**

#### 5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

#### 5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

#### Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion

#### 5.3. Special protective actions for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

## **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

#### **6.2.** Environmental precautions

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Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

#### 6.3. Methods and material for containment and cleaning up

Contain spill. Cover spill area with a fire-extinguishing foam designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR - AFFF type foam is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with water. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

#### 7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from acids. Store away from oxidizing agents.

## **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

#### **Occupational exposure limits**

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

C.A.S. No.	Agency	Limit type	<b>Additional Comments</b>
67-63-0	ACGIH	TWA:200 ppm;STEL:400 ppm	A4: Not class. as human
			carcin
67-63-0	OSHA	TWA:980 mg/m3(400 ppm)	
	67-63-0	67-63-0 ACGIH	67-63-0 ACGIH TWA:200 ppm;STEL:400 ppm

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

## CEIL: Ceiling

#### 8.2. Exposure controls

#### 8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment. Use explosion-proof ventilation equipment.

#### 8.2.2. Personal protective equipment (PPE)

#### **Eye/face protection**

3M <sup>™</sup> Adhesion	Promoter 111	05/21/18
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Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Indirect Vented Goggles

#### **Skin/hand protection**

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Gloves made from the following material(s) are recommended: Neoprene Nitrile Rubber

#### **Respiratory protection**

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors

For questions about suitability for a specific application, consult with your respirator manufacturer.

## **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

General Physical Form:	Liquid	
Odor, Color, Grade:	mild odor, clear/colorless liquid	
Odor threshold	No Data Available	
рН	No Data Available	
Melting point	Not Applicable	
Boiling Point	82.4 °C	
Flash Point	11 °C [Test Method:Closed Cup]	
Evaporation rate	No Data Available	
Flammability (solid, gas)	Not Applicable	
Flammable Limits(LEL)	2 % volume	
Flammable Limits(UEL)	12.7 % volume	
Vapor Pressure	33 mmHg [@ 68 °F]	
Vapor Density	2.1	
Density	0.789 g/ml	
Specific Gravity	0.789 [ <i>Ref Std</i> :WATER=1]	
Solubility in Water	Complete	
Solubility- non-water	No Data Available	
Partition coefficient: n-octanol/ water	No Data Available	
Autoignition temperature	425 °C	
Decomposition temperature	No Data Available	
Viscosity	No Data Available	
Hazardous Air Pollutants	0 % weight [ <i>Test Method</i> :Calculated]	
Molecular weight	No Data Available	
Volatile Organic Compounds	780 g/l [Test Method:calculated SCAQMD rule 443.1]	
	[Details:low solids less exempts]	
Percent volatile	99 % weight [Test Method:Estimated]	
VOC Less H2O & Exempt Solvents	98.8 % [Test Method:calculated per CARB title 2]	

VOC Less H2O & Exempt Solvents

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

## 10.2. Chemical stability

Stable.

**10.3.** Possibility of hazardous reactions Hazardous polymerization will not occur.

**10.4. Conditions to avoid** Sparks and/or flames

**10.5. Incompatible materials** None known.

10.6. Hazardous decomposition products Substance

None known.

#### **Condition**

Refer to section 5.2 for hazardous decomposition products during combustion.

## **SECTION 11: Toxicological information**

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

#### Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause additional health effects (see below).

#### **Skin Contact:**

Prolonged or repeated exposure may cause:

Dermal Defatting: Signs/symptoms may include localized redness, itching, drying and cracking of skin.

#### **Eye Contact:**

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

#### **Ingestion:**

May be harmful if swallowed. Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea. May cause additional health effects (see below).

#### **Additional Health Effects:**

#### Single exposure may cause target organ effects:

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

#### **Toxicological Data**

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

#### **Acute Toxicity**

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE2,000 - 5,000 mg/kg
Isopropyl alcohol	Dermal	Rabbit	LD50 12,870 mg/kg
Isopropyl alcohol	Inhalation-	Rat	LC50 72.6 mg/l
	Vapor (4		
	hours)		
Isopropyl alcohol	Ingestion	Rat	LD50 4,710 mg/kg
Active Ingredient (NJTS Reg No 04499600- 7161)	Dermal	Rabbit	LD50 > 15,300 mg/kg
Active Ingredient (NJTS Reg No 04499600- 7161)	Ingestion	Rat	LD50 7,500 mg/kg

ATE = acute toxicity estimate

#### **Skin Corrosion/Irritation**

Name	Species	Value
Isopropyl alcohol	Multiple	No significant irritation
	animal	
	species	
Active Ingredient (NJTS Reg No 04499600- 7161)	Rabbit	No significant irritation

#### Serious Eye Damage/Irritation

Name	Species	Value
Isopropyl alcohol	Rabbit	Severe irritant
Active Ingredient (NJTS Reg No 04499600- 7161)	Rabbit	Severe irritant

#### **Skin Sensitization**

Name	Species	Value
Isopropyl alcohol	Guinea	Not classified
	pig	

#### **Respiratory Sensitization**

For the component/components, either no data are currently available or the data are not sufficient for classification.

#### Germ Cell Mutagenicity

Name	Route	Value
Isopropyl alcohol	In Vitro	Not mutagenic
Isopropyl alcohol	In vivo	Not mutagenic
Active Ingredient (NJTS Reg No 04499600- 7161)	In Vitro	Not mutagenic

#### Carcinogenicity

Name	Route	Species	Value
Isopropyl alcohol	Inhalation	Rat	Some positive data exist, but the data are not
			sufficient for classification

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#### **Reproductive Toxicity**

#### **Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
Isopropyl alcohol	Ingestion	Not classified for development	Rat	NOAEL 400 mg/kg/day	during organogenesi s
Isopropyl alcohol	Inhalation	Not classified for development	Rat	LOAEL 9 mg/l	during gestation

#### Target Organ(s)

#### Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Isopropyl alcohol	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Isopropyl alcohol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Isopropyl alcohol	Inhalation	auditory system	Not classified	Guinea pig	NOAEL 13.4 mg/l	24 hours
Isopropyl alcohol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse

#### Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Isopropyl alcohol	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 12.3 mg/l	24 months
Isopropyl alcohol	Inhalation	nervous system	Not classified	Rat	NOAEL 12 mg/l	13 weeks
Isopropyl alcohol	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 400 mg/kg/day	12 weeks

#### **Aspiration Hazard**

For the component/components, either no data are currently available or the data are not sufficient for classification.

# Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

## **SECTION 12: Ecological information**

#### **Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

#### **Chemical fate information**

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

## **SECTION 13: Disposal considerations**

#### 13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Incinerate in a permitted waste incineration facility. As a disposal alternative, utilize an acceptable permitted waste disposal

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facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

#### EPA Hazardous Waste Number (RCRA): D001 (Ignitable)

## **SECTION 14: Transport Information**

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501

### **SECTION 15: Regulatory information**

#### **15.1. US Federal Regulations**

Contact 3M for more information.

#### **EPCRA 311/312 Hazard Classifications:**

## Physical Hazards

Flammable (gases, aerosols, liquids, or solids)

#### Health Hazards

Serious eye damage or eye irritation

Specific target organ toxicity (single or repeated exposure)

#### **15.2. State Regulations**

Contact 3M for more information.

#### **15.3.** Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

This product complies with the New Zealand Hazardous Substances and New Organisms Act (1996).

Contact 3M for more information.

#### 15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

## **SECTION 16: Other information**

#### **NFPA Hazard Classification**

Health: 2 Flammability: 3 Instability: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

# HMIS Hazard ClassificationHealth: \*2Flammability: 3Physical Hazard: 0Personal Protection: X - See PPE section.

Hazardous Material Identification System (HMIS® IV) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® IV ratings are to be used with a fully implemented HMIS® IV program. HMIS® is a registered mark of the American Coatings Association (ACA).

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